



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
1011 East Tudor Road
Anchorage, Alaska 99503-6199



IN REPLY REFER TO

AFES/MMM

DEC 33 2014

Ms. Suzan Simonds
Permits and Regulatory Manager
SAExploration, Inc.
82040 Sandlewood Place, Suite 102
Anchorage, Alaska 99507

Dear Ms. Simonds:

We have received your request dated October 19, 2014, for a Letter of Authorization (LOA) for the incidental take of polar bears in association with the SAExploration, Inc., LLC (SAE) Umingmak 2015 Program Horseshoe Winter Seismic Survey on the North Slope of Alaska.

In response, and in accordance with regulations listed at 76 FR 47010, dated August 3, 2011, enclosed is LOA 14-20 that will allow SAE to take small numbers of polar bears incidental to activities associated with the SAE Umingmak 2015 Program Horseshoe Winter Seismic Survey on the North Slope of Alaska.

The proposed project is the second year in a three year winter seismic survey. In each winter season SAE proposes to conduct seismic surveys on one to two prospects. The proposed project is land based, 3D seismic survey in the area of the Colville River, South of Nuiqsut. A detailed description of the proposed activities is provided in SAE's *Umingmak 2015 Program Horseshoe Plan of Operations Winter Seismic Survey*.

All provisions contained within SAE's *Umingmak 2015 Program Horseshoe Plan of Operations Winter Seismic Survey*, including *Appendix C Field Operating Procedure Polar Bear Protocol*, are incorporated by reference into this LOA. Project field camps and personnel may limit encounters of polar bears by being observant of approaching animals (i.e., the use of polar bear guards) and by allowing the animals to pass unhindered. The SAE will also: 1) Provide copies of the polar bear observation form to all contractors operating under the LOA; 2) report any polar bear sightings, or signs of polar bears, such as tracks or excavations, to this office using the polar bear observation report or email; and, 3) report any possible den locations that are found during work activities within 12 hours to our office. U.S. Fish and Wildlife Service (Service) biologists are available at the phone numbers listed below and noted in your interaction plan if questions or concerns arise.

If a polar bear interaction escalates into a life threatening situation, section 101(c) of the MMPA allows, without specific authorization, the take (including lethal take) of a polar bear if such taking is necessary for self-defense or to save the life of a person in immediate danger, and such taking is reported to the Service within 24 hours.

Polar bear conservation has benefited from monitoring programs associated with the Incidental Take Program since 1993. Monitoring serves to assess the effect of industrial activities on polar bears by evaluating trends and effects of bear encounter rates, take frequency, as well as the location and timing of encounters. Additionally, through monitoring, the Service seeks to limit disturbance to maternal polar bear den sites, both known dens and those areas that could possibly be preferred by denning polar bears. Personnel must use caution when operating near these areas during the maternal denning period (mid-November to mid-April). A polar bear den detection survey will be required in the areas of potential denning habitat where SAE proposes to operate.

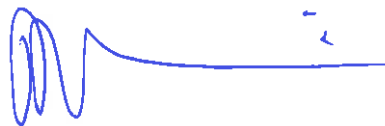
The U.S. Geological Survey has posted information regarding polar bear denning habitat on the Alaska Science Center (ASC) website. The den habitat map (ARC/INFO export file), the mapping manuscript (PDF file), and a picture of den habitat (JPG file) are available on the ASC website: <http://www.absc.usgs.gov/dataproducts.htm>. Use these resources when planning activities in potential denning areas.

If any changes develop during the project, such as activities or location, the Service must be notified prior to the planned operation. This will allow us to evaluate the activity and, if appropriate, amend the LOA.

The Service has completed intra-Service consultation under the Endangered Species Act of 1973, as amended (ESA), and has determined that the issuance this LOA is not likely to jeopardize the continuing existence of polar bears. No additional authorization under the ESA is required.

If you have any further questions, please contact Mr. Craig Perham or Mr. Christopher Putnam of our Marine Mammals Management Office, at (907) 786-3810 or (907) 786-3844, respectively.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized, cursive 'C' followed by a long horizontal line.

Chief, Marine Mammals Management

Enclosure

cc: Mr. Richard Shideler, Alaska Department of Fish and Game (email)
U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office
U.S. Fish and Wildlife Service, Office of Law Enforcement
North Slope Borough, Department of Law



IN REPLY REFER TO

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE
1011 East Tudor Road
Anchorage, Alaska 99503-6199



AFES/MMM

LETTER OF AUTHORIZATION (14-20)

ISSUED: January 1, 2015
EXPIRES: January 1, 2016

SAExploration, Inc., LLC (SAE) is hereby authorized to take small numbers of polar bears and incidental to activities associated with the SAE Umingmak 2015 Program Horseshoe Winter Seismic Survey on the North Slope of Alaska.

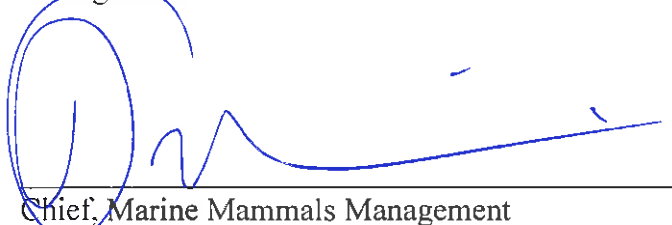
The proposed project is the second year in a three year winter seismic survey. In each winter season SAE proposes to conduct seismic surveys on one to two prospects. The proposed project is land based, 3D seismic survey in the area of the Colville River, South of Nuiqsut. A detailed description of the proposed activities is provided in SAE's *Umingmak 2015 Program Horseshoe Plan of Operations Winter Seismic Survey*.

This U.S. Fish & Wildlife Service (Service) Letter of Authorization (LOA) and the required conditions below apply to all employees, contractors, and personnel performing SAE approved work under the scope of operations to be conducted. This authorization stipulates the following conditions:

1. Intentional take of polar bears is not authorized.
2. The SAE *Umingmak 2015 Program Horseshoe Plan of Operations Winter Seismic Survey*, including *Appendix C Field Operating Procedure Polar Bear Protocol* is approved and all provisions must be complied with unless specifically noted otherwise in this LOA.
3. A copy of this LOA and the approved plans listed above must be posted and available for all personnel and in the possession of the operators of all vehicles, vessels and aircraft engaging in activities under the authority of this LOA.
4. Project operations managers, or designates, must be fully aware, understand and be capable of implementing the conditions of this LOA.

5. At the discretion of the Service, SAE must allow the Service to place an observer on site, including any facilities, vessels, aircraft, or vehicles, to monitor the impacts of the activity on marine mammals, when requested.
6. Polar bear and walrus monitoring, reporting, and survey activities must be conducted in accordance with 50 CFR Section 18.128 and must comply with the following monitoring, mitigation, and reporting requirements:
 - Project personnel must cooperate with the Service, and other designated Federal, State, or local agencies to monitor the impacts of oil and gas exploration activities on polar bears.
 - If any changes develop in the project during the period approved under this LOA, such as activities, location, or methods, SAE must notify the Service, Marine Mammals Management Office (MMM) prior to the implementation of such changes.
 - Project personnel must not conduct activities that operate nor pass within one mile (1.6 kilometers) of known polar bear dens, and all observed dens must be reported to the Service, MMM within 12 hours of discovery. If occupied dens are identified within one mile of activities, work within the immediate area will cease and the Service must be contacted for guidance. The Service will evaluate these instances on a case-by-case basis to determine the appropriate action. Potential actions may range from cessation or modification of work to conducting additional monitoring, and SAE must comply with any additional measures specified.
 - A polar bear den detection survey will be required in the areas of potential denning habitat where SAE proposes to operate and must be completed to Service standards prior to initiation of the seismic survey.
 - Qualified personnel must be designated by SAE to observe, record, and report the effects of the activity on polar bears to the Service within 24 hours of visual observation.
 - An annual monitoring report must be submitted by SAE to the Service, MMM as required under 50 CFR § 18.128, which will be received no later than 90 days after the expiration date of the LOA.

This Letter of Authorization is valid for the period indicated on this authorization, unless extended or terminated in writing by the U.S. Fish and Wildlife Service, Marine Mammals Management Office.



Chief, Marine Mammals Management

12/23/14
Date